

**SUMMARY OF HYDROLOGIC CONDITIONS
IN THE
UPPER DELAWARE RIVER BASIN**

August 2002

Prepared by the
Office of the Delaware River Master
Milford, Pennsylvania

Adjusted streamflow in the upper Delaware River Basin during August was deficient. The maximum daily mean discharge of 2,120 cfs occurred on August 30. The minimum daily mean discharge was 1,540 cfs on August 28.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during August was 1,760 cfs, which is 84 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 579 cfs, or 40 percent of median (water years 1961-90).

On the basis of a 12-station average, precipitation during August was 2.98 inches, which is 78 percent of the 61-year average. The maximum daily-average precipitation during the month was 0.64 inches on August 24. Precipitation in the upper Delaware River Basin during the past 12 months was 4.80 inches less than the long-term average. Precipitation during August was 0.85 inches less than the long-term average for the month.

Combined storage September 1, 2002 in Pepacton, Cannonsville, and Neversink Reservoirs was 60 percent of capacity above the point of maximum depletion. The combined storage of 162 billion gallons was 45 billion gallons less than that of one month ago and 17 billion gallons less than that of one year ago. Median storage on the first day of September in 35 years of record is 202 billion gallons.

As part of a statewide network, the USGS operates 12 observation wells in the Pennsylvania part of the Delaware River Basin. Mean water levels during August were below average in 11 of the wells. Water levels in all 12 of the wells were trending downward in comparison to July levels, and water levels in 11 of the wells were below August 2001 levels.

HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to Aug. 2001		September 2001 to August 2002					
	Average		Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Sept.	3.83	43.18	5.37	38.38	140	89	+1.54	-4.80
Oct.	3.38	39.35	1.28	33.01	38	84	-2.10	-6.34
Nov.	3.83	35.97	1.37	31.73	36	88	-2.46	-4.24
Dec.	3.36	32.14	2.80	30.36	83	94	-.56	-1.78
Jan.	3.00	28.78	2.03	27.56	68	96	-.97	-1.22
Feb.	2.65	25.78	1.59	25.53	60	99	-1.06	-.25
Mar.	3.35	23.13	3.47	23.94	104	104	+.12	+.81
Apr.	3.73	19.78	3.71	20.47	99	103	-.02	+.69
May	4.19	16.05	6.00	16.76	143	104	+1.81	+.71
June	3.96	11.86	6.32	10.76	160	91	+2.36	-1.10
July	4.07	7.90	1.46	4.44	36	56	-2.61	-3.46
Aug.	3.83	3.83	2.98	2.98	78	78	-.85	-.85

Note: Amount shown in cumulative columns is total from month shown to present.

STREAMFLOW, IN CFS

DELAWARE RIVER AT MONTAGUE, N.J.

Month	1940-2000			2002 Monthly mean	Percent of median
	Maximum	Median	Minimum		
August (observed)	14,230 (1955)	2,105	715 (1954)	1,760	84
August (adjusted)	17,410 (1955)	1,418	364 (1964)	579	41
September (observed)	9,167 (1960)	2,037	892 (1941)		
September (adjusted)	10,720 (1960)	1,496	324 (1964)		